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Listing of claims

Claims 1-41 (canceled)

1 ~~42~~. (New) A nucleic acid sequence encoding a modified single chain Fv molecule, wherein said single chain Fv molecule comprises a heavy chain variable domain and a light chain variable domain that interact to form an antigen binding site,

wherein said heavy chain variable domain comprises an intra-heavy chain inter-domain interface region and said light chain variable domain comprises an intra-light chain inter-domain interface region

and wherein at least one amino acid in an intrachain inter-domain interface region is modified so as to decrease the hydrophobicity in said intra-chain inter-domain interface region.

2 ~~43~~. (New) A nucleic acid sequence encoding a modified polypeptide comprising a heavy chain variable domain, wherein said heavy chain variable domain comprises an intra-heavy chain inter-domain interface region,

and wherein at least one amino acid in said intra-heavy chain inter-domain interface region is modified so as to decrease the hydrophobicity in said region.

3 ~~44~~. (New) The nucleic acid sequence according to claim ~~43~~<sup>2</sup>, wherein said intra-heavy chain inter-domain interface comprises residues 9, 10, 11, 13, 14, 41, 42, 43, 84, 87, 89, 105, 108, 110, 112, 113 of said heavy chain variable domain.

4 ~~45~~. (New) A nucleic acid sequence encoding a modified polypeptide comprising a light chain variable domain, wherein said light chain variable domain comprises an intra-light chain inter-domain interface region,

and wherein at least one amino acid in said intra-light chain inter-domain interface region is modified so as to decrease the hydrophobicity in said region.

5 ~~46~~. (New) The nucleic acid sequence according to claim ~~45~~<sup>4</sup>, wherein said inter-domain interface comprises residues 9, 10, 12, 15, 39, 40, 41, 80, 81, 83, 103, 105, 106, 106A, 107, 108 of said light chain variable domain.

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<sup>6</sup> 47. (New) The nucleic acid sequence according to claim <sup>1</sup> 42 in which said modification comprises insertion of one or more hydrophilic amino acids or deletion of one or more hydrophobic amino acids.

<sup>7</sup> 48. (New) The nucleic acid sequence according to claim <sup>1</sup> 42 in which said modification comprises any two or more of:

- a) a substitution of one or more amino acids with amino acids which are more hydrophilic than the one or more amino acids being substituted for;
- b) an insertion of one or more hydrophilic amino acids; and
- c) a deletion of one or more hydrophobic amino acids.

<sup>8</sup> 49. (New) The nucleic acid sequence according to claim <sup>6</sup> 47 or <sup>7</sup> 48 in which said substituted or inserted amino acid is selected from the group consisting of Asn, Asp, Arg, Gln, Glu, Gly, His, Lys, Ser, and Thr.

<sup>9</sup> 50. (New). The nucleic acid sequence according to claim <sup>2 3 5</sup> 45, <sup>4</sup> 46, or <sup>5</sup> 46, further comprising a contiguous sequence which encodes one or more additional moieties.

<sup>10</sup> 51. (New) The nucleic acid sequence according to claim <sup>9</sup> 50 in which at least one of said additional moieties is a toxin, a cytokine, or a reporter enzyme.

<sup>10</sup> 52. (New) The nucleic acid sequence according to claim <sup>10</sup> 51 in which at least one of said additional moieties is at least part of a surface protein of an organism.

<sup>11</sup> 53. (New) The nucleic acid sequence according to claim <sup>11</sup> 52 in which said organism is a filamentous bacteriophage.

<sup>12</sup> 54. (New) The nucleic acid sequence according to claim <sup>12</sup> 53 in which said surface protein is the geneIII protein.

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<sup>9</sup>  
~~14~~ 55. (New) The nucleic acid sequence according to claim ~~50~~ in which at least one of said additional moieties is capable of binding a metal ion.

<sup>14</sup>  
~~15~~ 56. (New) The nucleic acid sequence according to claim ~~50~~ in which at least one of said additional moieties comprises at least five histidines.

<sup>9</sup>  
~~16~~ 57. (New) The nucleic acid sequence according to claim ~~50~~ in which said additional moiety is a labeling tag peptide.

<sup>16</sup>  
~~17~~ 58. (New) The nucleic acid sequence according to claim ~~57~~ in which said labeling tag peptide is c-myc or FLAG.

<sup>9</sup>  
~~18~~ 59. (New) The nucleic acid sequence according to claim ~~50~~ in which said additional moiety comprises a peptide comprising an association domain..

<sup>18</sup>  
~~19~~ 60. (New) The nucleic acid sequence according to claim ~~59~~ in which said association domain comprises a leucine zipper or a helix-turn-helix motif.

<sup>1 2</sup>  
~~3~~ <sup>20</sup> 61. (New) A vector comprising a nucleic acid sequence according to claim ~~42~~, ~~43~~, or

<sup>20</sup>  
~~21~~ 62. (New) A host cell comprising a vector according to claim ~~61~~.

<sup>1</sup>  
~~22~~ 63. (New) The nucleic acid sequence according to claim ~~62~~, wherein at least one amino acid in said intra-heavy chain inter-domain interface and at least one amino acid in said intra-light chain inter-domain interface is modified.